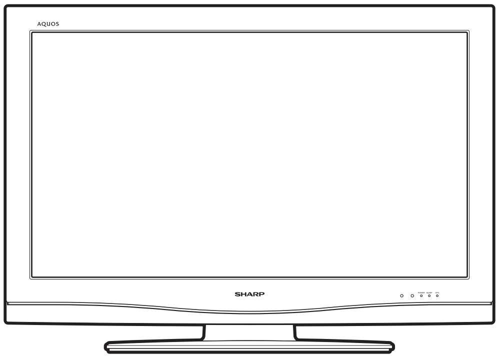
SHARP SERVICE MANUAL

No. S77L3LC37DW99



LCD COLOR TELEVISION

MODEL LC-37DW99U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

OUTLINE

This model is based on the LC-37D62U and is changed some parts. This Service Manual covers the modifications alone. For the other points, refer to the LC-32/37D62U (No. S17A9LC32D62U) Service Manual.

CONTENTS

Parts marked with " ⚠ " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

OUTLINE AND DIFFERENCES FROM BASE MODEL

OUTLINE

This model is based on the LC-37D62U and is changed some parts. This Service Manual covers the modifications alone. For the other points, refer to the LC-32/37D62U (No. S17A9LC32D62U) Service Manual.

LIST OF CHANGED PARTS

Ref. No.	Description	LC-37D62U	LC-37DW99U	Note
PRINTED WIRING BOARD ASSEMBLIES				
	R/C, LED Unit	DUNTKD909FM02	←	—
	KEY Unit	DUNTKD910FM02	←	—
	MAIN Unit	DUNTKE028FM06	←	—
	TERMINAL Unit	DUNTKD999FM07	←	—
	POWER Unit	RDENCA203WJQZ	←	—
LCD PANEL				
	37" LCD Panel Module Unit	R1LK370D3LZ20Z	←	—
CABINET AND MECHANICAL PARTS				
Please refer to a Parts list				
PACKING PARTS AND ACCESSORIES				
Please refer to a Parts list				

SAFETY PRECAUTION

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

■WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE FUSE.

F701 (125V 8A)
F4702 (250V 6.3A)

■BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

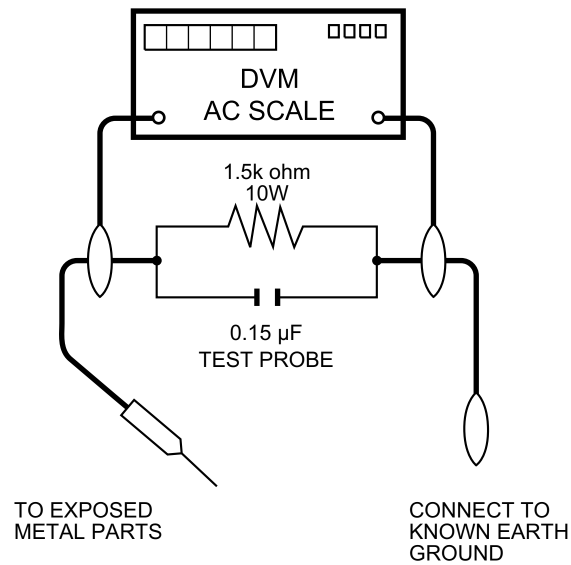
Before returning the receiver to the user, perform the following safety checks:

3. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
4. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
5. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 120 volt AC outlet.
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

  All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

  Any reading of 0.75 Vrms (this corresponds to 0.5 mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



//

SAFETY NOTICE

Many electrical and mechanical parts in LCD color television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " ⚠ " and shaded areas in the Replacement Parts List and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit.

The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

//

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ **Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.**

■ AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.

PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE

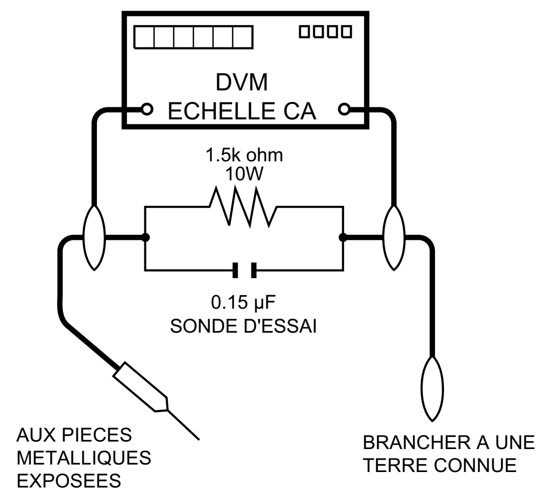
F701 (125V 8A)
F4702 (250V 6.3A)

■ VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

3. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
4. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistancecapacité, les isolateurs mécaniques, etc.
5. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:

- Brancher le cordon d'alimentation directem-ent à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
- A l'aide de deux fils à pinces, brancher une résistance de 1.5 kΩ 10 watts en parallèle avec un condensateur de 0.15µF en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000Ω/V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance.
  Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)
  La tension de pointe mesurèe ne doit pas dépasser 0.75V (correspondante au courant CA de pointe de 0.5mA).
  Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseur ACL présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "⚠" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.
Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

PRECAUTIONS FOR USING LEAD-FREE SOLDER

■Employing lead-free solder

- "PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

  Example:

LF a
Sn-Ag-Cu

Indicates lead-free solder of tin, silver and copper.

LF a/a
Sn-Ag-Cu

Indicates lead-free solder of tin, silver and copper.

■Using lead-free wire solder

- When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

  As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

■Soldering

- As the melting point of lead-free solder (Sn-Ag-Cu) is about 220 °C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

  Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

  If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

  When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

- Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

PARTS CODE	PRICE RANK	PART DELIVERY	DESCRIPTION
ZHNDAi123250E	BL	J	ϕ0.3mm 250g (1roll)
ZHNDAi126500E	BK	J	ϕ0.6mm 500g (1roll)
ZHNDAi12801KE	BM	J	ϕ1.0mm 1kg (1roll)

MEMO

SHARP PARTS GUIDE

No. S77L3LC37DW99

Note:
The reference numbers on the PWB are arranged in alphabetical order.

MODEL LC-37DW99U

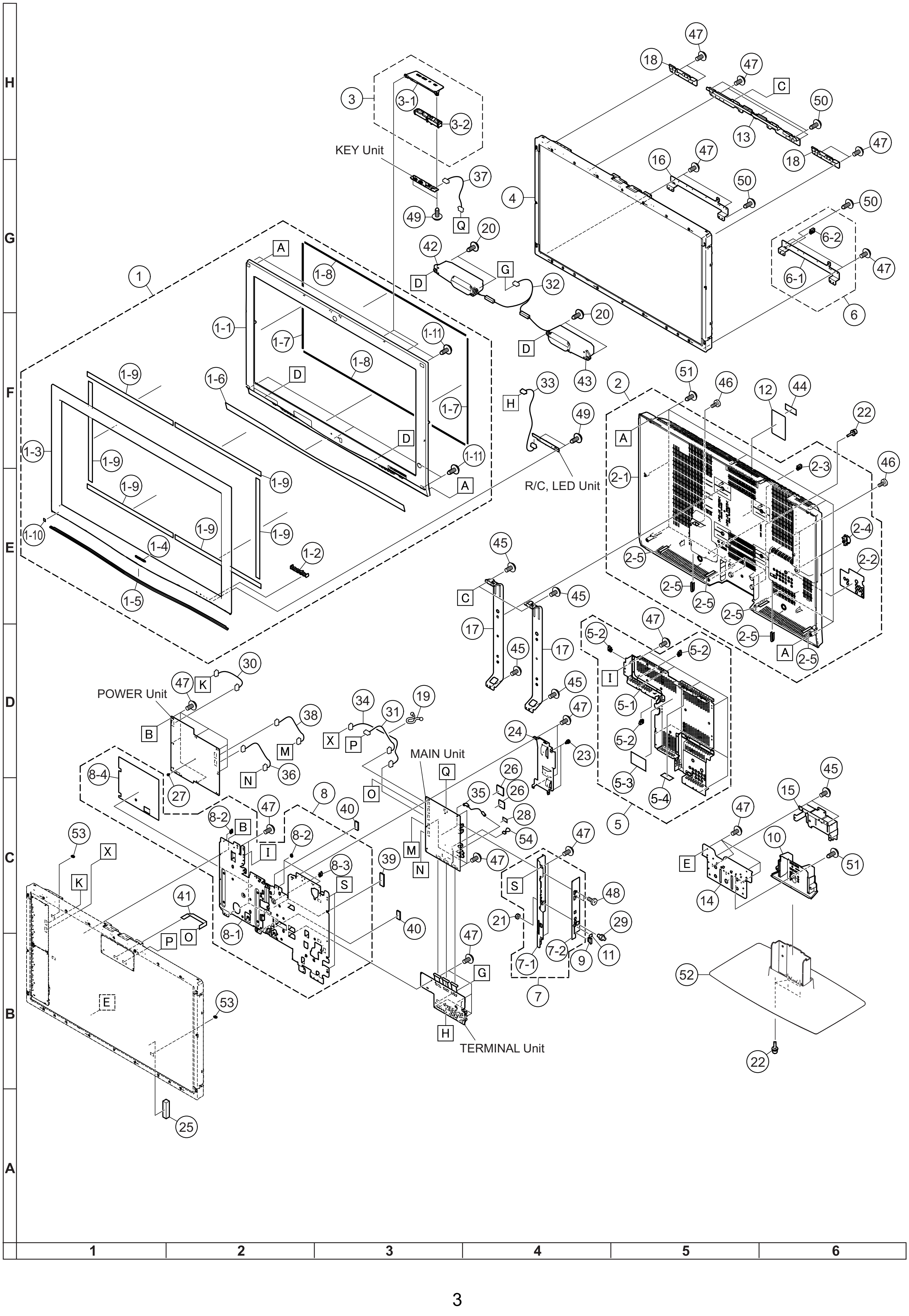
CONTENTS

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)					
N	DUNTKD909FM02	–		–	R/C, LED Unit
N	DUNTKD910FM02	–		–	KEY Unit
N	DUNTKD999FM07	–	N	–	TERMINAL Unit
[2] PRINTED WIRING BOARD ASSEMBLIES					
N	DUNTKE028FM06	CN	N	R	MAIN Unit
⚠ N	RDENCA203WJQZ	BP		X	POWER Unit
[3] LCD PANEL (NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.)					
N	R1LK370D3LZ20Z	EC	N	J	37" Wide LCD Panel Module Unit

[4] CABINET AND MECHANICAL PARTS

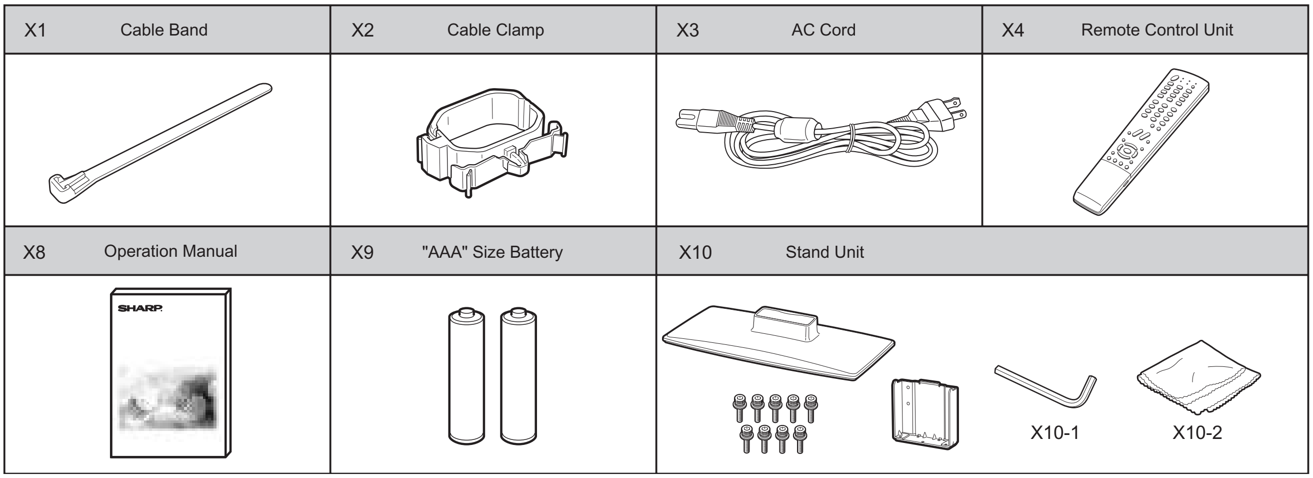


[4] CABINET AND MECHANICAL PARTS

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
1	CCABAB690WJ03		N	X	Cabinet A Ass'y
1-1	Not Available	–		–	Cabinet A
1-2	GCOVAB821WJSA			X	LED Cover
1-3	GCOVAC044WJKB		N	X	Front Cover
1-4	Not Available	–		–	SHARP Badge
1-5	HDECSA007WJSB	AP		X	Shine Trim
1-6	HPNLSA123WJSA	AY		X	Speaker Net
1-7	PSPAHA416WJZZ	AC		J	Spacer, x2
1-8	PSPAHA801WJZZ			X	Spacer, x2
1-9	PSPAZB074WJZZ			X	Spacer, x6
1-10	TLABZA635WJZZ	AC		J	POP Label
1-11	XJPS730P08WS0	AA		J	Screw for Front Cover, x5
2	CCABBB022WJ01	BQ	N	X	Cabinet B Ass'y
2-1	Not Available	–	N	–	Cabinet B
2-2	HiNDPC317WJSA		N	X	Terminal Label
2-3	LHLDWA012WJKZ	AC		J	Wire Holder
2-4	LHLDWA057WJKZ	AE		J	Wire Holder
2-5	PSPAHB078WJZZ			X	Spacer for Speaker, x6
3	CCOVAB929WJ01	AM		X	Top Cover Ass'y
3-1	Not Available	–		–	Top Cover
3-2	JBTN-A614WJKA			X	Operation Button
4	R1LK370D3LZ20Z	EC	N	J	37" Wide LCD Panel Module Unit
5	CSLDMB075WJ01	AX	N	X	Main Shield Ass'y
5-1	Not Available	–	N	–	Main Shield
5-2	LHLDWA102WJKZ	AB		J	Wire Holder, x3
5-3	PMLT-A423WJZZ	AD	N	X	Spacer
5-4	PSPAHB078WJZZ			X	Spacer
6	CANGKA957WJ01	AL		X	Rug Angle Bottom R Ass'y
6-1	Not Available	–	N	–	Rug Angle Bottom R
6-2	LHLDWA120WJKZ	AB		J	Wire Holder
7	CANGKA948WJ01	AN	N	X	Jack Angle Ass'y
7-1	Not Available	–	N	–	Jack Angle (Long)
7-2	HiNDPC316WJSA		N	X	Jack Indicator Plate
8	CCHSMA403WJ03			X	Chassis Tray Ass'y
8-1	Not Available	–	N	–	Chassis Tray
8-2	LHLDWA102WJKZ	AB		J	Wire Holder, x3
8-3	LHLDWA120WJKZ	AB		J	Wire Holder
8-4	PZETKA219WJZZ			X	Insulator
9	GCOVAA678WJKA	AE		J	SD Card Cover
10	GCOVAC011WJKA	AP	N	X	Stand Area Cover
11	HiNDPB715WJSA	AF		X	Terminal Label
12	HiNDPC617WJSA		N	X	Model Label
13	LANGKA865WJ3W	AN		X	LCD Angle L
14	LANGKA913WJM1	BC		X	Stand Fix Angle
15	LANGKA914WJFW	AL		X	Stand Assist Angle
16	LANGKA957WJFW	AL		X	Rug Angle Bottom L
17	LANGKA958WJN1	AQ	N	X	Center Angle, x2
18	LANGKB018WJFW	AF		X	LCD Angle S, x2
19	LHLDW1003PEZZ	AA		J	Wire Holder
20	LX-HZA003WJFN	AC		J	Screw for SP-BOX, x4
21	LX-NZ3047GEZZ	AA		J	Nut
22	LX-BZA176WJF9		N	X	Screw for Stand, x9
23	PCLiCA004WJKZ	AC		J	Push Rivet, x2
24	PRDARA424WJFW	BB		J	Heat Sink
25	PSLDMA584WJZZ	AE		J	Shield
26	PSPAZA917WJKZ	AH		J	Spacer, x2
27	PSPAZB030WJKZ	AB		J	Spacer
28	PSPAZB192WJKZ	AF		J	Spacer
29	QCNCWA496WJZZ	AK		J	Connector (F-RCA)
30	QCNW-E634WJQZ	AE		J	Connecting Cord (LA)
31	QCNW-E894WJQZ	AP		J	Connecting Cord (LP)
32	QCNW-F596WJQZ	AL	N	X	Connecting Cord (SP)
33	QCNW-F597WJQZ	AR	N	X	Connecting Cord (RA)
34	QCNW-F598WJQZ	AL	N	X	Connecting Cord (LB)
35	QCNW-E249WJPZ	AH		J	Connecting Cord (TUNER)
36	QCNW-E258WJQZ	AG		J	Connecting Cord (PD)
37	QCNW-E266WJQZ	AF		J	Connecting Cord (KM)
38	QCNW-E902WJQZ	AH		J	Connecting Cord (PH)
39	QEARZA069WJZZ	AH		J	Earth Plate
40	QEARZA080WJZZ	AD		J	Earth Plate, x2
41	QPWBHE120WJQZ	AX	N	X	Connecting Cord (LV)
42	RSP-ZA215WJZZ	AY		X	Speaker (Left)
43	RSP-ZA216WJZZ	AY		X	Speaker (Right)
44	Not Available	–		–	No. Label
45	XBBS740P06000	AA		J	Screw for Angle, x6
46	XBBS930P06000	AA		J	Screw for Cabinet B, x4
47	XBPS730P06WS0	AA		J	Screw for PWB, x15 Angle, x26
48	XBPS830P06000	AA		J	Screw for HDMI, x2
49	XEBS930P10000	AA		J	Screw for LED, x2 KEY, x2
50	XEBS940P10000	AB		J	Screw for Panel, x4
51	XEBS940P16000	AB		J	Screw for Cabinet B, x10
52	CDAi-A348WJ04		N	X	Stand Unit
52-1	CDAi-A348WJ03		N	X	Stand Base Ass'y
52-1-1	Not Available	–	N	–	Stand Base
52-1-2	LANGKA955WJZZ			X	Base Angle

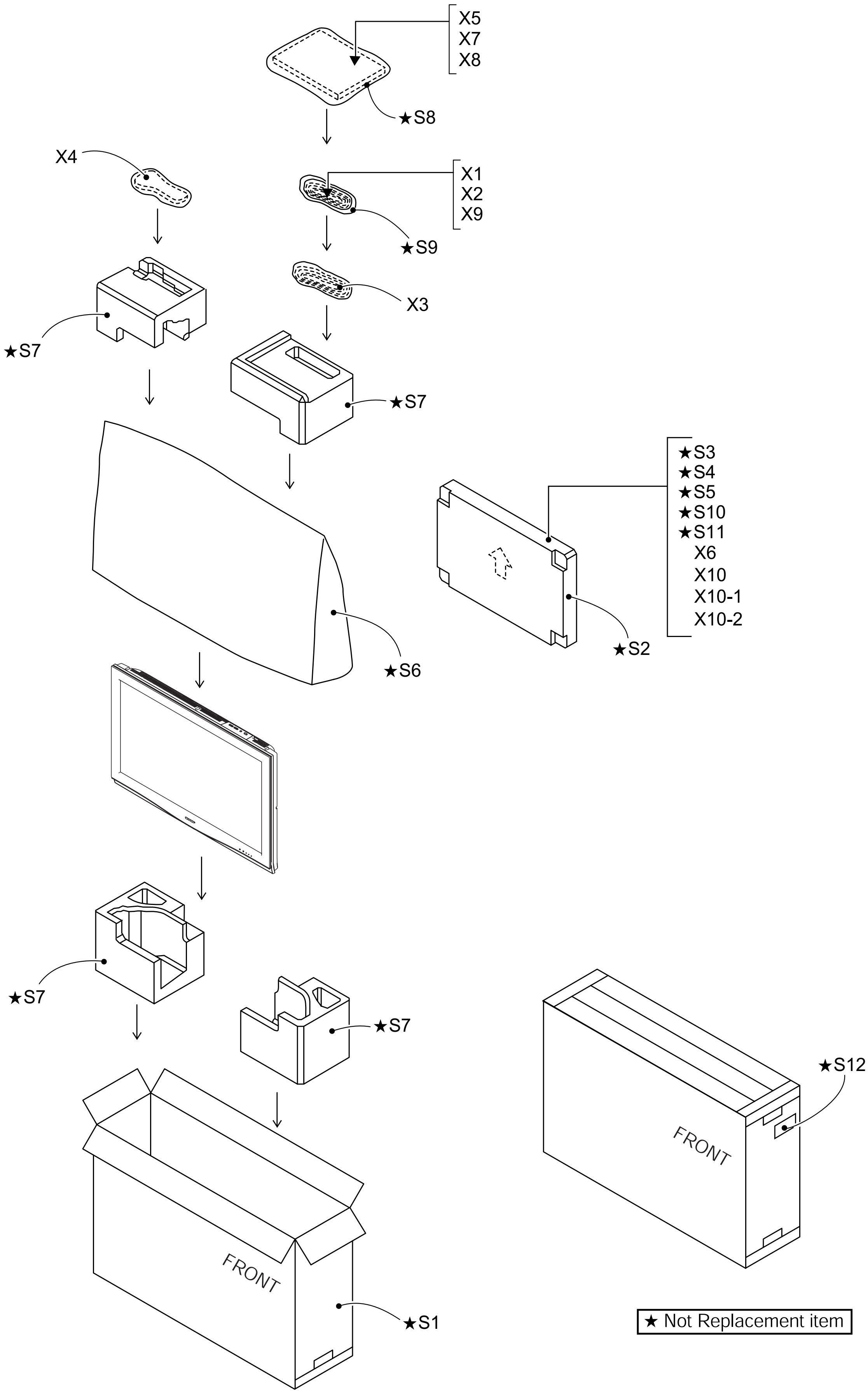
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[4] CABINET AND MECHANICAL PARTS					
52-1-3	PSPAZA949WJZZ			X	Leg Cushion A, x4
52-1-4	PSPAZA950WJZZ			X	Leg Cushion B, x2
52-1-5	XEBS940P10000	AB		J	Screw for Cover/Angle, x6
53	LHLDWA139WJKZ	AC		J	Wire Holder, x2
54	QCNW-F305WJQZ	AF		X	Connecting Cord (MODEL SELECT)
55	PMLT-A367WJZZ	AB		J	Spacer
56	PSLDMA840WJZZ	AD		J	Shield
57	GDAi-A333WJSA			X	Stand Support

[5] SUPPLIED ACCESSORIES



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] SUPPLIED ACCESSORIES					
X1	LHLDWA083WJ00	AD		J	Cable Band
X2	LHLDWA131WJKZ	AE		J	Cable Clamp
⚠ X3	QACCDA039WJPZ	AQ		J	AC Cord
X4	RRMCGA535WJSA	AZ		J	Remote Control Unit
X5	TCADEA208WJZZ	AD		X	Enquete Card
X6	TCAUZA286WJZZ		N	X	Caution Card
X7	TGAN-A768WJZZ	AD		X	Extend Warranty
X8	TiNS-D361WJZZ		N	X	Operation Manual
X9	Not Available	–		–	"AAA"Size Battery
X10	CDAi-A348WJ04		N	X	Stand Unit
X10-1	UKOGLA001WJZZ	AB		J	Tool for Stand
X10-2	UCLEZA001WJZZ	AD		J	Cleaning Cloth

[6] PACKING PARTS (NOT REPLACEMENT ITEM)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[6] PACKING PARTS (NOT REPLACEMENT ITEM)					
S1	SPAKCD801WJZZ	–	N	–	Packing Case
S2	SPAKFB165WJZZ	–		–	Stand Case
S3	SPAKFB166WJZZ	–		–	Stand Pad
S4	SPAKPA797WJZZ	–		–	Mirror Mat Base
S5	SPAKPA798WJZZ	–		–	Mirror Mat Sup
S6	SPAKPA831WJZZ	–		–	Wrapping Paper (Monitor)
S7	SPAKXB364WJZZ	–		–	Packing Add.
S8	SSAKA0101GJZZ	–		–	Polyethylene Bag
S9	SSAKAA032WJZZ	–		–	Polyethylene Bag
S10	SSAKHA033WJZZ	–	N	–	Polyethylene Bag for Cloth
S11	SSAKHA035WJZZ	–	N	–	Polyethylene Bag for Screw
S12	TLABKA009WJZZ	–		–	No. Label
[7] SERVICE JIG (USE FOR SERVICING)					
N	QCNW-C222WJQZ	AW		J	Connecting Cord (80pin 100cm)
N					PANEL to LCD CONTROL Unit
N	QCNW-D483WJQZ	AX		J	Connecting Cord (PH 12pin 100cm)
N					MAIN to POWER Unit
N	QCNW-E068WJQZ	AS		J	Connecting Cord (PD 6pin 100cm)
N					MAIN to POWER Unit
N	QCNW-E343WJQZ	AM		J	Connecting Cord (LA 3pin 100cm)
N					POWER to INVERTER Unit
N	QCNW-E579WJQZ	AP		J	Connecting Cord (LB 4-8pin 100cm)
N					MAIN to INVERTER Unit
N	QCNW-F137WJQZ	AX		J	Connecting Cord (LP 20pin 100cm)
N					MAIN to LCD CONTROL Unit
N	QCNW-E134WJQZ	BG		J	Connecting Cord (LV 41pin 40cm)
N					MAIN to LCD CONTROL Unit
N	QCNW-C799WJPZ	AG		J	Connecting Cord (Coaxial cable 150cm)
N					TUNER to TERMINAL Unit

SHARP

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